Amendments to the Specification

Please replace the paragraph beginning at page 5, line 28, with the following amended paragraph:

A radiation detector assembly **30** is arranged on the gantry **22** across from the x-ray source **14**. In the exemplary CT scanner **10** [[**12**]], the radiation detector assembly **30** spans a selected angular range that preferably comports with a fan angle of the x-ray beam. The radiation detector assembly **30** includes a plurality of modules **32** for acquiring imaging data along a portion of the **Z**-direction in each projection view. The radiation detector assembly **30** is arranged on the rotating gantry **22** opposite to the x-ray source **14** and rotates therewith so that the radiation detector assembly **30** receives x-rays that traverse the examination region **18** as the gantry **22** rotates.

Please replace the paragraph beginning at page 6, line 18, with the following amended paragraph:

Preferably, the graphical user interface **48** is programmed to interface a human operator with the CT scanner **10** [[**12**]] to allow the operator to initialize, execute, and control CT imaging sessions. The graphical user interface **48** is optionally interfaced with a communication network such as a hospital or clinic information network via which image reconstructions are transmitted to medical personnel, a patient information database is accessed, or the like.

Please replace the paragraph beginning at page 9, line 16, with the following amended paragraph:

With continuing reference to FIGURE 10A, the radiation absorbing masks **120** are preferably configured to include thin bridges or circumferential strips **130**, which provide mechanical stability by reducing the free aperture length. Preferably, strips **130**

are comparable with the width of an intra-element gap ~~132~~ between detector elements running in a circumferential direction.

Please replace the Abstract with the following amended Abstract:

A radiation detector ~~(30)~~ for a computed tomography scanner ~~(12)~~ includes a plurality of radiation detector modules ~~(32)~~. Each detector module ~~(32)~~ includes an anti-scatter module, at least one radiation absorbing mask ~~(120)~~ and a detector subassembly module ~~(100)~~. The anti-scatter module ~~(32)~~ includes radiation absorbing anti-scatter plates ~~(80)~~. The detector subassembly module ~~(100)~~ includes a substrate ~~(102)~~ and an array ~~(104)~~ of detector elements. The radiation absorbing mask ~~(120)~~ is a photoetched grid, formed of a radiation absorbing material and is positioned between the anti-scatter module ~~(78)~~ and the detector elements of array ~~(104)~~. The strip of the grid, that is parallel to the anti-scatter plates ~~(80)~~, is wider than each anti-scatter plate ~~(80)~~. The detector module ~~(32)~~ is aligned with a spatial focus ~~(74)~~ by inserting the alignment pins ~~(160)~~ into the alignment openings ~~(128)~~ of the radiation absorbing mask ~~(120)~~ and the alignment openings ~~(162)~~ of the detector subassembly module ~~(100)~~.